

Docket No. UF-10293  
Application Serial No. 09/780,041

In the claims

Please cancel claims 1-22, without prejudice.

Please add the following new claims:

Claim 23 (new)

- 1 23. A method for producing a non-human animal model of a neurodegenerative disease which comprises somatically transferring an aberrant form of a tau gene into brain tissue of a living non-human animal under conditions which result in the expression of said aberrant tau gene; wherein expression of said aberrant tau gene results in a neuropathology in said living non-human animal corresponding to a neurodegenerative disease.

Claim 24 (new)

- 1 24. The method of claim 23 wherein said neurodegenerative disease is selected from the group consisting of Alzheimer's Disease, Parkinson's Disease, and Huntington's Disease.

Claim 25 (new)

- 1 25. The method of claim 23 wherein said aberrant form of tau is P301L, associated with "fronto-temporal dementia with Parkinson's linked to chromosome 17 (FTDP-17)".

Claim 26 (new)

- 1 26. The method of claim 23 wherein said neuropathology is characterized as neurofibrillary tangles.

1 Claim 27 (new)

27. The method of claim 23, wherein said somatically transferring comprises injecting said aberrant tau gene into pre-selected areas of the brain of said non-human animal.

Claim 28 (new)

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- 1    28. The method of claim 23, wherein said brain tissue comprises nigrostriatal neurons,
- 2    septalhippocampal neurons, or both.

Claim 29 (new)

- 1    29. A method for inducing neuropathology in the brain of a non-human animal which
- 2    comprises injecting into the brain of said animal an effective amount of gene expression
- 3    construct encoding tau, alpha-synuclein, presenilin-1, amyloid precursor protein, or IL6,
- 4    or combinations thereof.

Claim 30 (new)

- 1    30. A method for inducing behavioral changes in a non-human animal which comprises
- 2    somatically transferring an aberrant tau gene directly into the brain of said non-human
- 3    animal.

Claim 31 (new)

- 1    31. The method of claim 30 wherein somatically transferring comprises injecting an
- 2    effective amount of gene expression construct encoding tau into the brain of said non-
- 3    human animal.

Claim 32 (new)

- 1    32. The method of claim 30 wherein somatically transferring comprises injecting an
- 2    effective amount of gene expression construct encoding tau, alpha-synuclein, presenilin-
- 3    1, amyloid precursor protein, and IL6.

Claim 33 (new)

- 1    33. The method of claim 30, wherein somatically transferring is achieved by using an
- 2    adeno-associated viral vector.

Claim 34 (new)

- 1    34. A composition comprising at least one gene construct adapted for producing a non-
- 2    human animal model of a human or non-human-animal disease by transferring at least